

**Title: Program Director Vacancy for Engineering Research Centers Program--
Vacancy Announcement--Dear Colleague Letter**

Date: February 1, 2002

Dear Colleague,

**PROGRAM DIRECTOR VACANCY FOR ENGINEERING RESEARCH CENTERS
(ERC) PROGRAM (Electrical Engineering or Computer Science)**

I am pleased to announce an opening for a senior-level electrical engineer or computer scientist with experience in interdisciplinary engineering research management to serve as a Program Director for the Engineering Research Centers (ERC) Program, within the Division of Engineering Education and Centers (EEC), Directorate for Engineering. The Program Director position is a Temporary Appointment for three years under the Visiting Scientist/Engineer Program, the Intergovernmental Personnel Act (VSE or IPA "rotator" positions), or as a Temporary Federal Appointee. The term is renewable for up to three additional years. The desired starting date is July 1, 2002, but earlier starts and brief delays can be accommodated.

ERCs play critical roles in research, education, diversity, outreach and industrial collaboration. Each focuses cross-disciplinary teams of faculty and students on the definition, fundamental understanding, development, and validation of technologies needed to realize a well-defined class of engineered systems with the potential to spawn whole new industries or radically transform the product lines, processing technologies, or service delivery methodologies of current industries. ERC faculty, students and industry partners integrate discovery and learning in an interdisciplinary environment that reflects the complexities and realities of real-world technology and product development. NSF views ERCs as change agents for academic engineering programs and the engineering community at large and expects ERC innovations in research and education to add to current knowledge, affect industrial practice, impact curricula at all levels from pre-college to life-long learning, employ and reach out to a population that reflects the diversity of the United States, and be disseminated to and beyond academic and industry partners. Each ERC is funded by NSF for up to 10 years and undergoes annual reviews. Other information about the ERC Program may be found at <http://www.eng.nsf.gov/eec/erc.htm> and a detailed description of the activities of the ERCs may be found in fact sheets describing the individual ERCs at <http://www.nsf.gov/pubs/2000/nsf00137/start.htm>.

The individual selected will be a member of the team of Program Directors and staff responsible for the selection and post-award oversight and review of Engineering Research Centers and will work under the Leader of the ERC Program, who is responsible for overall management of the ERC Program. The position advertised is for an electrical engineer or computer scientist responsible for the oversight of the subset of ERCs focused on topics in those technical areas. There are currently seven such ERCs and more can be expected as new ERCs come on line in FY 2003 and FY 2005.

The technical concentrations of current centers are on wireless microsystems, electronic packaging, power electronics, subsurface sensing and imaging systems, neuromorphic engineering, multimedia communications, and computer integrated surgical systems. The successful candidate also will be responsible for coordinating these ERCs to assure effective collaboration among them. The Program Director will work with a team of other Program Directors from NSF to carry out post-award oversight responsibilities. The oversight of ERCs is a complex and interesting endeavor that requires background in research management, strategic planning, integration of research into educational materials. The position also involves coordination of the centers' activities with the research programs funded by the ENG/Division of Electrical and Communications Systems (ECS), other divisions of the NSF and other relevant agencies

In summary, this position encompasses the following activities:

- Specific oversight of a subset of ERCs, using peer review as a tool to develop the center's capabilities, review their performance, and determine continuation, renewal, or termination; the oversight will encompass research management, industrial collaboration, education, and center management;
- Development of strategies to promote synergy among all of the ERCs working in electrical and computer science fields, and between those centers and electrical engineering and computer science research projects and programs within and outside the NSF, and;
- Management of review panels for electrical engineering/computer science proposals submitted to the ERC program under biennial program solicitations.

The position requires experience managing cross-disciplinary research in a university/industry environment context, as an academic, industrial, or government manager of industry/university research programs. Experience with the complexities of developing engineered systems, as opposed to devices or components, an understanding of the interface between research and technological innovation, and the ability to work in and manage teams are all highly desirable. An interest in working with the scientific and engineering community to enhance the effectiveness of research and educational programs to produce graduates who are more effective in practice is also important, as is both depth and breadth of technical expertise. The Program Director should have a doctoral degree in Electrical Engineering or Computer Science or in another field of science complemented by experience working as an electrical engineer.

Program Director positions at the National Science Foundation provide a challenging experience and an excellent opportunity to encourage and support engineering research and education and for working with academe and industry to develop strategic plans to advance technology and produce engineering graduates who are more effective in industrial practice. The successful candidate will work with other Program Directors in formulating and implementing improvements in the ERC Program, developing cooperation among government, academia, and industry, fostering outreach to underrepresented groups, and providing leadership within NSF and the research community. The position requires a doctorate with a minimum of 10 years of academic, government, or industry experience. We are very interested in attracting qualified women and underrepresented minority candidates to this position.

I would appreciate any nominations that you may have for suitable candidates. Should you or your colleagues be interested in this position, please contact the EEC Search Committee Coordinator, Mary F. Poats (mpoats@nsf.gov) and forward a curriculum vita to her by March 29, 2002. Applications will be reviewed after this date, though the position will remain open until filled.

For questions or further information, please contact:

Mary F. Poats, EEC Search Committee Coordinator
Program Manager
Division of Engineering Education and Centers
National Science Foundation
4201 Wilson Blvd., Arlington, VA 22230
Phone: 703-2925357
Fax: 703-292-9051
Email: mpoats@nsf.gov

Lynn Preston, ERC Program Team Leader
Deputy Division Director - Centers
Division of Engineering Education and Centers
National Science Foundation
4201 Wilson Blvd., Arlington, VA 22230
Phone: 703-292-8380
Fax: 703-292-9051
Email: lpreston@nsf.gov

Sincerely,

Bruce Kramer, Director
Division of Engineering Education and Centers
National Science Foundation
4201 Wilson Blvd., Arlington, VA 22230
Phone: 703-292-8380
Fax: 703-292-9051
Email: bkramer@nsf.gov